

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: JAMES MALIGEORGOS ET AL.

Filed: HEREWITH

For: PARTITIONING OF RADIO-FREQUENCY APPARATUS

Serial No.: UNKNOWN

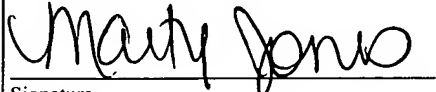
Group Art Unit: UNKNOWN

Examiner: UNKNOWN

Atty Dkt: SILA:127C1

NUMBER: EV324157709US

I hereby certify that this paper or fee is being deposited with the United States Postal Service "EXPRESS MAIL POST OFFICE TO ADDRESSEE" service, postage prepaid, under 37 CFR 1.10 on the date indicated below and is address to: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313.



Signature

12/8/02

Date

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97, and 1.98, it is respectfully requested that this Information Disclosure Statement be entered and the document(s) listed on attached Form PTO-1449 be considered by the Examiner and made of record.

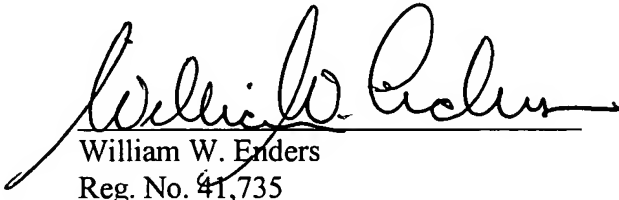
In accordance with 37 C.F.R §§ 1.97(g),(h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

The present Information Disclosure Statement is being filed prior to the receipt of a first Official Action reflecting an examination on the merits, and hence is believed to be timely filed in

accordance with 37 C.F.R. § 1.97(b). No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the Commissioner is hereby authorized to deduct said fees from Deposit Account No. 10-1205/SILA:127C1.

Applicant respectfully requests that the listed document(s) be made of record in the present case.

Respectfully submitted,



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Enclosures

<b>Form PTO-1449</b> (modified)		Atty. Docket No. SILA:127C1	Serial No. UNKNOWN
List of Patents and Publications for Applicant's  <b>INFORMATION DISCLOSURE STATEMENT</b>  (Use several sheets if necessary)		Applicants JAMES MALIGEORGOS ET AL.	
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U.S. Patent Documents See Pages 1-7	Foreign Patent Documents See Pages 7-8	Other Art See Pages 7-15	

### U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date if App.
	A1	5,828,955	10/27/98	Lipowski et al.			8/30/95
	A2	6,035,186	3/7/00	Moore et al.			3/11/97
	A3	6,075,979	6/13/00	Holtvoeth et al.			3/5/97
	A4	5,764,171	6/9/98	Stikvoort			4/2/96
	A5	6,148,048	11/14/00	Kerth et al.			9/26/97
	A6	4,713,563	12/15/87	Marshall et al.			5/12/86
	A7	4,070,632	1/24/78	Tuttle			9/22/76
	A8	4,236,252	11/25/80	Kominami et al.			2/6/79
	A9	4,680,588	7/14/87	Cantwell			12/5/85
	A10	4,857,928	8/15/89	Gailus et al.			1/28/88
	A11	4,989,074	1/29/91	Matsumoto			9/21/89
	A12	5,050,192	9/17/91	Nawata			11/21/90
	A13	5,083,304	1/21/92	Cahill			9/28/90
	A14	5,142,695	8/25/92	Roberts et al.			3/21/91
	A15	5,194,826	3/16/93	Huusko			4/12/91
	A16	5,235,410	8/10/93	Hurley			7/10/91
	A17	5,267,272	11/30/93	Cai et al.			2/14/91
	A18	5,283,578	2/1/94	Ribner et al.			11/16/92
	A19	5,345,406	9/6/94	Williams			8/25/92
	A20	5,430,890	7/4/95	Vogt et al.			11/20/92
	A21	5,442,353	8/15/95	Jackson			10/25/93
	A22	5,451,948	9/19/95	Jekel			2/28/94
	A23	5,500,645	3/19/96	Ribner et al.			3/14/94

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	A24	5,557,642	9/17/96	Williams			11/14/94
	A25	5,712,628	1/27/98	Phillips et al.			8/31/95
	A26	5,742,189	4/21/98	Yoshida et al.			9/14/95
	A27	5,862,465	1/19/99	Ou			12/30/96
	A28	5,973,601	10/26/99	Campana			12/2/97
	A29	5,758,276	5/26/98	Shirakawa et al.			5/31/96
	A30	5,740,524	4/14/98	Pace et al.			12/14/95
	A31	4,623,926	11/18/86	Sakamoto			11/9/836
	A32	5,341,135	8/23/94	Pearce			4/30/92
	A33	5,241,310	8/31/93	Tiemann			3/2/92
	A34	4,562,591	12/31/85	Stikvoort			2/2/84
	A35	5,243,345	2/21/92	Naus et al.			2/21/92
	A36	5,469,475	11/21/95	Voorman			5/31/91
	A37	4,912,729	3/27/90	Van Rens et al.			12/15/88
	A38	4,627,021	12/2/86	Persoon et al.			3/13/84
	A39	4,692,737	9/8/87	Stikvoort et al.			10/17/86
	A40	4,584,659	4/22/86	Stikvoort			7/5/83
	A41	4,797,845	1/10/89	Stikvoort			12/11/86
	A42	4,604,720	8/5/86	Stikvoort			3/16/84
	A43	5,157,343	10/20/92	Voorman			5/31/91
	A44	5,124,705	7/23/92	Voorman			7/10/91
	A45	4,468,790	8/28/84	Hofelt			2/16/82
	A46	5,859,878	1/12/99	Phillips et al.			8/31/95

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	A47	6,323,735	11/27/01	Welland et al.			5/25/00
	A48	6,167,245	12/26/00	Welland			5/29/98
	A49	6,388,536	5/14/02	Welland			6/27/00
	A50	6,147,567	11/14/02	Welland et al.			5/29/98
	A51	6,327,463	12/4/01	Welland			5/29/98
	A52	6,233,441	5/15/01	Welland			5/19/98
	A53	6,304,146	10/16/01	Welland			5/29/98
	A54	6,308,055	10/23/01	Welland et al.			5/29/98
	A55	6,150,891	11/21/00	Welland et al.			5/29/98
	A56	6,317,006	11/13/01	Welland et al.			7/21/00
	A57	6,137,372	10/24/00	Welland			5/29/98
	A58	6,226,506	5/1/01	Welland et al.			5/29/98
	A59	6,311,050	10/30/01	Welland et al.			5/29/98
	A60	4,179,670	12/18/79	Kingsbury			1/27/78
	A61	4,204,174	5/20/80	King			11/9/78
	A62	4,686,488	8/11/87	Attenborough			1/31/86
	A63	4,758,802	7/19/88	Jackson			2/21/86
	A64	5,055,802	10/8/91	Hietala et al.			4/30/90
	A65	5,079,521	1/7/92	Gaskell et al.			11/21/90
	A66	5,224,132	6/29/93	Goldberg			1/17/92
	A67	5,379,003	1/3/95	Bizen			12/9/93
	A68	5,446,767	8/29/95	Nakagawa et al.			4/20/93
	A69	5,517,534	5/14/96	Knierim			11/14/94

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	A70	5,534,825	7/9/96	Goma et al.			4/28/95
	A71	5,539,359	7/23/96	Goma			3/29/95
	A72	5,576,667	11/19/96	Goma			11/21/95
	A73	5,581,584	12/3/96	Inoue et al.			7/20/94
	A74	3,571,743	3/23/71	Menkes			10/30/68
	A75	3,899,746	8/12/75	Gammel			9/14/73
	A76	4,009,448	2/22/77	Hopwood et al.			1/6/76
	A77	4,099,137	7/4/78	Alm, Jr. et al.			7/10/77
	A78	4,805,198	2/14/89	Stern et al.			5/19/87
	A79	4,888,564	12/19/89	Ishigaki			11/2/88
	A80	5,315,269	5/24/94	Fujii			7/31/92
	A81	5,495,205	2/27/96	Parker et al.			1/6/95
	A82	5,625,325	4/29/97	Rotzoll et al.			12/22/95
	A83	5,648,744	7/15/97	Prakash et al.			12/22/95
	A84	5,686,864	11/11/97	Martin et al.			9/5/95
	A85	5,739,730	4/14/98	Rotzoll			12/22/95
	A86	5,852,384	12/22/98	Sakakura et al.			4/18/97
	A87	5,856,763	1/5/99	Reeser et al.			3/5/97
	A88	5,936,474	8/10/99	Rousselin			3/28/97
	A89	5,157,358	10/20/92	Benson			11/20/91
	A90	4,205,272	5/27/80	Kumagai			4/13/78
	A91	4,980,653	12/25/90	Shepherd			9/5/89
	A92	5,909,150	6/1/99	Kostelnik et al.			10/23/97

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	A93	4,713,631	12/15/87	Enderby et al.			1/6/86
	A94	3,538,450	11/3/70	Andrea et al.			11/4/68
	A95	4,484,153	11/20/84	Borras et al.			4/6/81
	A96	4,602,220	7/22/86	Kurihara			8/14/85
	A97	4,893,087	1/9/90	Davis			1/7/88
	A98	4,905,306	2/27/90	Anderson			2/26/88
	A99	4,926,144	5/15/90	Bell			9/29/88
	A100	4,998,077	3/5/91	Nanni et al.			12/20/89
	A101	5,034,703	7/23/91	Schumacher			7/11/90
	A102	5,036,295	7/30/91	Kamitani			7/30/90
	A103	5,117,206	5/26/92	Imamura			12/4/90
	A104	5,175,884	12/29/92	Suarez			6/1/90
	A105	5,281,927	1/25/94	Parker			5/20/93
	A106	5,369,376	11/29/94	Leblebicioglu			11/29/91
	A107	5,644,270	7/1/97	Moyer et al.			3/15/96
	A108	5,691,669	11/25/97	Tsai et al.			1/11/96
	A109	5,748,043	5/5/98	Koslov			5/3/94
	A110	5,808,531	9/15/98	Nakano			11/8/96
	A111	5,844,868	12/1/98	Takahashi et al.			3/26/97
	A112	5,867,069	2/2/99	Kiser			6/9/98
	A113	5,898,345	4/27/99	Namura et al.			7/14/97
	A114	5,963,100	10/5/99	Tolson et al.			2/24/98
	A115	5,705,955	1/6/98	Freeburg et al.			12/21/95

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	A116	4,926,140	5/15/90	Schenberg			7/19/89
	A117	5,038,117	8/6/91	Miller			9/7/90
	A118	5,258,720	11/2/93	Tanis et al.			3/2/84
	A119	5,258,724	11/2/93	Tanis et al.			12/30/83
	A120	5,661,269	8/26/97	Fukuzaki et al.			3/17/95
	A121	5,561,398	10/1/96	Rasmussen			5/16/95
	A122	5,619,148	4/8/97	Guo			10/10/95
	A123	6,016,332	1/18/00	Smith et al.			12/19/97
	A124	6,208,488	2/22/00	Landman et al.			10/30/97
	A125	6,130,577	10/10/00	Tamba et al.			6/11/96
	A126	3,983,485	9/28/76	Stuart			2/28/75
	A127	4,888,560	12/19/89	Ogura			7/15/88
	A128	4,255,714	3/10/81	Rosen			2/21/79
	A129	5,006,819	4/9/91	Buchan et al.			5/21/90
	A130	5,418,497	5/23/95	Martin			7/5/94
	A131	5,698,469	12/16/97	Mohwinkel et al.			3/6/95
	A132	5,949,291	9/7/99	Newland			1/21/98
	A133	4,057,760	11/8/77	Koch			6/7/76
	A134	5,831,482	11/3/98	Salvi et al.			3/3/97
	A135	5,351,014	9/27/94	Ichiyoshi			8/2/93
	A136	US 2002/000859 3A1	1/24/02	Gomez et al.			12/14/00
	A137	6,539,066	3/25/03	Heinen			11/10/99

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	A138	6,343,207	1/29/02	Hessel et al.			11/3/98
	A139	6,002,925	12/14/99	Vu et al.			3/24/97

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	B1	WO 00/22735	4/20/00	Ali			
	B2	GB2233518A	1/9/91	Dedic			
	B3	0643477A2	3/15/95	Hulkko et al.			
	B4	WO 00/11794	3/2/00	Moore et al.			
	B5	WO 00/01074	1/6/00	Van Der Zwan et al.			
	B6	WO 99/22456	5/6/99	Grenabo			10/27/98
	B7	JP359127408 A	7/23/84	Shibata et al.			1/11/83
	B8	JP403258103 A	11/18/91	Kitamura et al.			3/8/90
	B9	JP402298107 A	12/10/90	Obayashi			5/12/89
	B10	JP403070202 A	3/26/91	Araki et al.			8/9/89
	B11	JP04035302 A	2/6/92				5/28/90

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Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date if App.
	B12	JP357058403 A	4/8/82	Urabe et al.			9/25/80

### Other Art (Including Author, Title, Date, Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C1	Stephen Jantzi et al., "Quadrature Bandpass $\Delta\Sigma$ Modulation for Digital Radio," IEEE Journal of Solid-State Circuits, Vol. 32, No. 12, December 1997, pp. 1935-1950.
	C2	Stephen Jantzi et al, "A Complex Bandpass $\Delta\Sigma$ Converter For Digital Radio," ISCAS, May/June 1994, pp. 453-456.
	C3	"Analog Devices Delivers World's First Open Market GSM Direct Conversion Radio Chipset," Analog Devices Corporate Information Press Release, <a href="http://contentanalog.com/pressrelease/prdisplay/0,1622,102,00.html">http://contentanalog.com/pressrelease/prdisplay/0,1622,102,00.html</a> , September 13, 1999, pp. 1-4.
	C4	Data Sheet, CX74017, "RF Transceiver for Single, Dual, or Tri-Band GSM/GPRS Applications," Conexant, January 2, 2001, pp. 1-16.
	C5	Jacques C. Rudell et al, "A 1.9-GHz Wide-Band IF Double Conversion CMOS Receiver for Cordless Telephone Applications," IEEE Journal of Solid-State Circuits, Vol. 32, No. 12, December 1997, pp. 2071-2088.
	C6	Jan Crols et al., "Low-IF Topologies for High-Performance Analog Front Ends of Fully Integrated Receivers," IEEE Transactions on Circuits and Systems-II: Analog and Digital Signal Processing, Vol. 45, No. 3, March 1998, pp. 269-282.
	C7	Jacques C. Rudell et al., "Recent Developments In High Integration Multi-Standard CMOS Transceiver for Personal Communication Systems," invited paper at the 1998 International Symposium on Low Power Electronics, Monterey, California, 6 pgs.
	C8	Asad Abidi, "CMOS Wireless Transceivers: The New Wave," IEEE Communications Magazine, August 1999, pp. 119-124.
	C9	Data Sheet, UAA3535HL, "Low Power GSM/DCS/PCS Multi-band Transceiver," Philips Semiconductors, February 17, 2000, pp. 1-24.

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Exam. Init.	Ref. Des.	Citation
	C10	Stephen Jantzi et al., "FP 13.5: A Quadrature Bandpass $\Delta\Sigma$ Modulator for Digital Radio," Digest of Technical Papers, 1997 IEEE International Solid-State Circuits Conference, First Edition, February 1997, pp. 216-217, 460.
	C11	S. A. Jantzi et al., "The Effects of Mismatch In Complex Bandpass $\Delta\Sigma$ Modulators," IEEE, 1996, pp. 227-230.
	C12	Qiuting Huang, "CMOS RF Design-The Low Power Dimension," IEEE 2000 Custom Integrated Circuits Conference, pp. 161-166.
	C13	Paolo Orsatti et al., "A 20-mA-Receive, 55-mA-Transmit, Single-Chip GSM Transceiver in 0.25- $\mu$ m CMOS," IEEE Journal of Solid-State Circuits, Vol. 34, No. 12, December 1999, pp. 1869-1880.
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